

Product Report

Wire Line Tension Meter – 50 tonne

Wire Tension & Position Transducer

Wire Tension

The 35mm diameter wire rope passes through a triple pulley arrangement with the outer pulleys acting as guides and the centre pulley measuring the tension on the wire rope.

This centre pulley runs on an axle incorporating bonded strain gauge technology that measure the force applied to axle as the tension in the rope increases and decreases. This axle is known as the force transducer.

The force transducer transmits an electrical signal proportional to wire tension to the locally mounted current transmitter which powers the strain gauges and converts there output to a 40 to 20 milli-amp analogue output. This output is transmitted to the main instrument.

The whole assembly is manufactured in stainless steel.

Wire Position

The body of the transducer houses an array of position sensors that monitor target areas on the side of the offset pulley. These sensors transmit a series of pulses directly to the main instrument, where the data is converted to; wire line distance traveled and line direction is displayed.

Wire line direction is used to enable the meter to continually display wire position.

Standard environmental rating: IP67

Principal Dimensions:

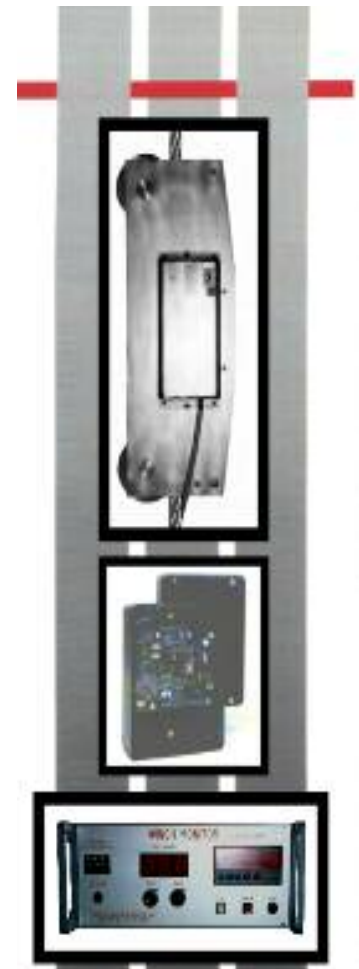
Overall length: 800mm
Overall height: 350mm
Overall width: 240mm (including side covers)

Wire Tension Amplifier

The wire tension amplifier is housed in a stainless steel enclosure and is powered by 110V ac or 24VDC.

It energizes the clevis pin force cell in the wire tension transducer which outputs an analogue 4 – 20 milli-amp signal to the main instrument that is proportional to the tension on the wire passing through the pulleys.

Standard environmental rating: IP67



Product Report

Wire Tension & Position Indicator

This unit is housed in a standard rack mounting enclosure and powered by 240V ac

The instrument has the following principal features:

Wire tension:

L.E.D. display scaled 0 - 50.0 tonne x 0.1 tonne

Zero adjust potentiometer:

This feature enables the display to be zeroed

Span adjust potentiometer:

This feature enables the display to be spanned

Load Trip Facility:

This feature provides a preset load trip output that is adjustable over the calibrated range of the wire line tension meter via a digital pushbutton control that is scaled 0 - 50.0 tonne x 0.1 tonne

Wire line position L.E.D. display is scaled from 0 - 9999 meters.

There is a reset counter facility and the wire line direction changes automatically.

Please note that the above information is typical and for information only.

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Information is subject to change without prior notification.

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